Amendments to the Claims

Please amend the claims as follows:

1.   (Currently Amended) ~~In a channel~~ A channel estimator using a CIR (channel impulse response) estimating value~~, a channel estimator~~ and adopting signal masking, comprising:

a CIR masking unit for removing a noise included in the CIR estimating value;

a mask signal generator generating a mask signal according to the CIR estimating value;

a CIR delayer matching a synchronization between the CIR estimating value and the mask signal; and

a masking processor removing the noise by performing the masking so that the CIR estimating value is outputted only for a section where the mask signal exits.

2.   (Canceled)

3.   (Currently amended) The channel estimator of claim 1 ~~claim 2~~, wherein the mask signal generator generates the mask signal based on a CIR critical value and a mask window size wherein the CIR critical value is a minimum value accredited with a real CIR.

4.   (Original) The channel estimator of claim 3, wherein the CIR critical value is set to a value between '0.1' and '0.2' when a maximum value of a CIR is normalized as '1' on a situation that there exists no ghost at all.

5.   (Original) The channel estimator of claim 3, wherein the mask window size is about ±10 symbols centering around a CIR exceeding the CIR critical value.

6.   (Currently Amended) The channel estimator of claim 1 ~~claim 2~~, wherein the masking processor is a multiplexer selecting to output either the CIR estimating value or '0' according to the mask signal.

7.   (Currently Amended) The channel estimator of claim 1 ~~claim 2~~, wherein the masking processor is a multiplier multiplying the mask signal and the CIR estimating value together to output the CIR estimating value of a section where the mask signal is not '0'.

8.   (Currently Amended) A channel estimator adopting signal masking, comprising:

a trained sequence generator outputting a trained sequence;

a cross correlator finding a cross correlating value between a received signal ~~transmitted from an outside~~ and the trained sequence;

a max value searcher detecting a maximum value of the cross correlating value by predetermined field unit;

a cross correlating vector generator outputting a cross correlating vector amounting to a CIR (channel impulse response) estimating range based on the maximum value of the cross correlating value;

a ROM previously storing to output an inverse matrix of an auto correlating value of the trained sequence;

an operator finding a CIR estimating value using the inverse matrix of the auto correlating value and the cross correlating vector; and

a CIR masking unit removing a noise included in the CIR estimating value.

9.   (Original) The channel estimator of claim 8, the CIR masking unit comprising:

a mask signal generator generating a mask signal according to the CIR estimating value;

a CIR delayer matching a synchronization between the CIR estimating value and the mask signal; and

a masking processor removing the noise by performing the masking so that the CIR estimating value is outputted only for a section where the mask signal exits.

10.   (Original) The channel estimator of claim 9, wherein the mask signal generator generates the mask signal based on a CIR critical value and a mask window size wherein the CIR critical value is a minimum value accredited with a real CIR.

11.   (Original) The channel estimator of claim 10, wherein the CIR critical value is set to a value between '0.1' and '0.2' when a maximum value of a CIR is normalized as '1' on a situation that there exists no ghost at all.

12.   (Original) The channel estimator of claim 10, wherein the mask window size is about ±10 symbols centering around a CIR exceeding the CIR critical value.

13.   (Original) The channel estimator of claim 9, wherein the masking processor is a multiplexer selecting to output either the CIR estimating value or '0' according to the mask signal.

14.   (Original) The channel estimator of claim 9, wherein the masking processor is a multiplier multiplying the mask signal and the CIR estimating value together to output the CIR estimating value of a section where the mask signal is not '0'.

15.   (Currently Amended) ~~In an equalizer performing channel estimating through a CIR (channel impulse response) estimating value, and a~~ A channel estimator adopting signal masking, comprising:

a CIR masking unit for removing a noise included in the CIR estimating value;

a mask signal generator generating a mask signal according to the CIR estimating value;

a CIR delayer matching a synchronization between the CIR estimating value and the mask signal; and

a masking processor removing the noise by performing the masking so that the CIR estimating value is outputted only for a section where the mask signal exits.